Remarks

The Office Action mailed March 16, 2004 has been carefully reviewed and the foregoing amendments have been made in consequence thereof.

Claims 1-24 are pending in this application. Claims 1-24 stand rejected.

In accordance with 37 C.F.R. 1.136(a), a one month extension of time is submitted herewith to extend the due date of the response to the Office Action dated March 16, 2004, for the above-identified patent application from June 16, 2004, through and including July 16, 2004. In accordance with 37 C.F.R. 1.17(a)(3), authorization to charge a deposit account in the amount of $110.00 to cover this extension of time request also is submitted herewith.

The rejection of Claims 1-7 under 35 U.S.C. § 101 as being directed to non-statutory subject matter is respectfully traversed.

The Office Action suggests at page 4 that "Claims 1-7 have no connection to the technological arts" and that "None of the steps indicate a connection to a computer or technology". Accordingly, the Office Action rejects Claims 1-7 as being directed to non-statutory subject matter. Applicants respectfully traverse these suggestions and this rejection. However, Applicants have amended Claim 1 to address the rejection set forth in the Office Action.

More specifically, Applicants submit that the claims of the present patent application are directed to practical applications in the technological arts. "Any sequence of operational steps can constitute a process within the meaning of the Patent Act so long as it is part of the technological arts." *In re Musgrave*, 431 F.2d 882 (C.C.P.A. 1970). For example, independent Claim 1 is a computer-implemented method for automated underwriting of a portfolio of segmentable, financial instrument assets using a portfolio valuation system. Applicants submit that automated underwriting of a portfolio of segmentable, financial instrument assets is a useful process that is considered to be within "the technological arts".

One specific example of such a method implementation is a computer with a processor programmed to at least one of define clusters of assets by common attributes, perform analytics

to enable a selection of sample assets from each defined cluster for valuation purposes, receive a value assigned to each sample asset which is based on an expert opinion, and perform an underwriting process on each sample asset using the expert opinion including determining whether each sample asset includes a combination of attributes and includes any additional attributes, analyzing each sample asset having a combination of attributes, and reconciling the value assigned to each sample asset having a combination of attributes. While the claims are not limited to the specific examples related to a computer with a programmed processor, the claims need not be so restricted to satisfy the requirement of Section 101.

Applicants further traverse the assertion included in the Office Action that Claims 1-7 are directed to non-statutory subject matter under Section 101 in light of the "Examination Guidelines for Computer-Related Inventions". The Examination Guidelines for Computer-Related Inventions provides in relevant part as follows:

> In order to determine whether the claim is limited to a practical application of an abstract idea, Office personnel must analyze the claim as a whole, in light of the specification, to understand what subject matter is being manipulated and how it is being manipulated. During this procedure, Office personnel must evaluate any statements of intended use or field of use, any data gathering step and any post-manipulation activity....Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under § 101. Further, when such a rejection is made, Office personnel must expressly state how the language of the claims has been interpreted to support the rejection.

Applicants respectfully submit that Claim 1 is limited to a practical application in the technological arts. Furthermore, Applicants respectfully submit that the Office Action does not expressly state how the language of Claim 1 supports the Section 101 rejection.

Claim 1 has been amended. Claim 1 recites a "computer-implemented method for automated underwriting of a portfolio of segmentable, financial instrument assets using a portfolio valuation system". Thus, Applicants submit that Claim 1 is directed to a useful process that is considered to be within "the technological arts". Furthermore, Claim 1 recites a "computer-implemented method for automated underwriting of a portfolio of segmentable, financial instrument assets using a portfolio valuation system, the portfolio valuation system including a computer coupled to a database". The method includes the step of "utilizing the computer to perform analytics that enable a selection of sample assets from each defined cluster

for valuation purposes...receiving at the computer a value assigned to each sample asset which is based on an expert opinion...." Thus, Claim 1 uses a computer system to perform certain steps of the process. Claim 1 is therefore directed to a practical application in the technological arts.

Dependent Claims 2-7 depend from independent Claim 1, and these dependent Claims are submitted to satisfy the requirements of Section 101 for the same reasons set forth above with respect to independent Claim 1.

The Office Action also suggests at page 5 that the "claimed invention however fails to produce 'useful, concrete, and tangible result' and therefore lacks a practical application." Applicants respectfully traverse this suggestion. Applicants have amended Claim 1.

More specifically, Applicants submit that the claimed invention does produce a useful, concrete, and tangible result. Claim 1 recites a computer-implemented method for automated underwriting of a portfolio of segmentable, financial instrument assets using a portfolio valuation system, the portfolio valuation system includes a computer coupled to a database, the method includes "defining clusters of assets by common attributes, wherein each defined cluster includes assets having common attributes...utilizing the computer to perform analytics that enable a selection of sample assets from each defined cluster for valuation purposes...receiving at the computer a value assigned to each sample asset which is based on an expert opinion...and performing an underwriting process on each sample asset using the expert opinion including determining whether each sample asset includes a combination of attributes and includes any additional attributes, analyzing each sample asset having a combination of attributes, and reconciling the value assigned to each sample asset having a combination of attributes."

Applicants respectfully submit that receiving a value assigned to each sample asset which is based on an expert opinion, and performing an underwriting process on each sample asset using the expert opinion as recited in Claim 1 is a useful, concrete and tangible result. Accordingly, Applicants submit that independent Claim 1 satisfies the requirements of Section 101.

Dependent Claims 2-7 depend from independent Claim 1, and these dependent Claims are submitted to satisfy the requirements of Section 101 for the same reasons set forth above with respect to independent Claim 1.

For at least the reasons set forth above, Applicants respectfully request that the Section 101 rejection of Claims 1-7 be withdrawn.

The rejection of Claims 1-24 under 35 U.S.C. § 112, second paragraph, is respectfully traversed. Applicants respectfully submit that Claims 1-24 satisfy section 112, second paragraph. More specifically, Applicants respectfully submit that Claims 1-24 are definite and particularly point out and distinctly claim the subject matter of the invention.

The Office Action suggests that with respect to independent Claims 1, 9 and 17 the term "values" is unclear and how the reconciliation is carried out is unclear. Applicants traverse these suggestions. Applicants, however, have amended Claims 1, 9 and 17 to expedite prosecution of this patent application. For example, Claim 1 recites a computer-implemented method for automated underwriting of a portfolio of segmentable, financial instrument assets that includes "receiving at the computer a value assigned to each sample asset which is based on an expert opinion...and performing an underwriting process on each sample asset using the expert opinion including determining whether each sample asset includes a combination of attributes and includes any additional attributes, analyzing each sample asset having a combination of attributes, and reconciling the value assigned to each sample asset having a combination of attributes." Accordingly, Applicants respectfully submit that the terms "value" and "reconciling the value assigned to each sample asset" as recited in Claim 1 are definite and particularly point out and distinctly claim the subject matter of the invention.

Independent Claims 9 and 17 also include similar recitations relating to the terms "value" and "reconciling the value assigned to each sample asset". Accordingly, Applicants respectfully submit that Claims 9 and 17 are also definite and particularly point out and distinctly claim the subject matter of the invention. Accordingly, Applicants respectfully submit that Claims 1, 9 and 17 satisfy Section 112, second paragraph.

Claims 2-8 depend from independent Claim 1, Claims 10-16 depend from independent Claim 9, and Claims 18-24 depend from independent Claim 17. Accordingly, for the same reasons set forth above, Applicants respectfully submit that Claims 2-8, 10-16, and 18-24 also satisfy Section 112, second paragraph.

Accordingly, Applicants respectfully request that the rejection of Claims 1-24 under Section 112, second paragraph, be withdrawn.

The rejection of Claims 1-24 under 35 U.S.C. § 102(e) as being anticipated by Freeman et al. (U.S. Pub. No. 2001/0029477) ("Freeman") is respectfully traversed.

Applicants respectfully submit that Freeman does not describe or suggest the claimed invention. As discussed below, at least one of the differences between the cited reference and the present invention is that Freeman does not describe or suggest a method for automated underwriting of a portfolio of segmentable, financial instrument assets that includes utilizing the computer to perform analytics that enable a selection of sample assets from each defined cluster for valuation purposes, and receiving at the computer a value assigned to each sample asset which is based on an expert opinion.

Moreover, Freeman does not describe or suggest performing an underwriting process on each sample asset using the expert opinion including determining whether each sample asset includes a combination of attributes and includes any additional attributes, analyzing each sample asset having a combination of attributes, and reconciling the value assigned to each sample asset having a combination of attributes. Rather, Freeman describes a method for mortgage and closed end loan portfolio management that includes predicting the default rate of loan portfolios at a selected future point in time.

Freeman describes a method for mortgage and closed end loan portfolio management in the form of an analytic tool designed to improve analysis of past and future performance of loan portfolios. The method includes aggregating loan units into loan vintages, wherein the loans in each vintage originate within a predetermined time interval of one another. The method further includes comparing different vintages to one another in a manner such that the ages of the loans in the different vintages are comparable to one another. An early warning component of the

system predicts delinquency rates expected for a portfolio of loans during a forward looking time window. A matrix link component of the invention combines the loan vintage analysis with the early warning component of the invention and predicts the default rate of the loan portfolios at a selected future point in time. The results of the analysis are graphically depicted and/or automatically fedback to provide "yes" or "no" decisions regarding investments in various loan portfolios (see abstract).

Claim 1 recites a computer-implemented method for automated underwriting of a portfolio of segmentable, financial instrument assets using a portfolio valuation system, the portfolio valuation system includes a computer coupled to a database, wherein the method includes "defining clusters of assets by common attributes, wherein each defined cluster includes assets having common attributes...utilizing the computer to perform analytics to enable a selection of sample assets from each defined cluster for valuation purposes...receiving at the computer a value assigned to each sample asset which is based on an expert opinion...performing an underwriting process on each sample asset using the expert opinion including determining whether each sample asset includes a combination of attributes and includes any additional attributes, analyzing each sample asset having a combination of attributes, and reconciling the value assigned to each sample asset having a combination of attributes."

Freeman does not describe or suggest a computer-implemented method for automated underwriting of a portfolio of segmentable, financial instrument assets that include utilizing the computer to perform analytics that enable a selection sample assets from each defined cluster for valuation purposes, and receiving at the computer a value assigned to each sample asset which is based on an expert opinion. Rather, Freeman describes a process for predicting the performance of a loan portfolio using a logistic regression formula that is applied to each loan unit. Specifically, Freeman determines a projected bad rate for each loan unit using the logistic regression formula. Although Freeman describes separating loan units into a plurality of loan groups based on a particular locality or a particular time frame, Freeman does not describe or suggest selecting sample assets from defined clusters, and then receiving a value assigned to each sample asset based on an expert opinion.

Moreover, Freeman does not describe or suggest a method that includes performing an underwriting process on sample assets using an expert opinion including determining whether each sample asset includes a combination of attributes and includes any additional attributes, analyzing each sample asset having a combination of attributes, and reconciling the value assigned to each sample asset having a combination of attributes. Rather, Freeman describes a process for predicting the performance of a loan portfolio using a logistic regression formula that is applied to each loan unit. Freeman does not describe or suggest a method for automated underwriting of a portfolio as recited in Claim 1. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Freeman.

Claims 2-8 depend from independent Claim 1. When the recitations of Claims 2-8 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-8 likewise are patentable over Freeman.

Claim 9 recites a portfolio valuation system for automated underwriting of segmentable, financial instrument assets that includes a computer configured as a server and further configured with a database of asset portfolios, and at least one client system connected to the server through a network, wherein the server is configured to "define clusters of assets by common attributes wherein each defined cluster includes assets having common attributes...select sample assets from each defined cluster for valuation purposes...receive a value assigned to each sample asset which is based on an expert opinion...perform an underwriting process on each sample asset using the expert opinion including determining whether each sample asset includes a combination of attributes and includes any additional attributes, analyzing each sample asset having a combination of attributes, and reconciling the value assigned to each sample asset having a combination of attributes."

Freeman does not describe or suggest a portfolio valuation system for automated underwriting of segmentable, financial instrument assets that includes a server configured to select sample assets from each defined cluster for valuation purposes, and to receive a value assigned to each sample asset which is based on an expert opinion. Rather, Freeman describes a process for predicting the performance of a loan portfolio using a logistic regression formula that is applied to each loan unit. Specifically, Freeman determines a projected bad rate for each loan

unit using the logistic regression formula. Although Freeman describes separating loan units into a plurality of loan groups based on a particular locality or a particular time frame, Freeman does not describe or suggest selecting sample assets from defined clusters, and then receiving a value assigned to each sample asset based on an expert opinion.

Moreover, Freeman does not describe or suggest a server configured to perform an underwriting process on sample assets using an expert opinion including determining whether each sample asset includes a combination of attributes and includes any additional attributes, analyzing each sample asset having a combination of attributes, and reconciling the value assigned to each sample asset having a combination of attributes. Rather, Freeman describes a process for predicting the performance of a loan portfolio using a logistic regression formula that is applied to each loan unit. Accordingly, Applicants respectfully submit that Claim 9 is patentable over Freeman.

Claims 10-16 depend from independent Claim 9. When the recitations of Claims 10-16 are considered in combination with the recitations of Claim 9, Applicants submit that dependent Claims 10-16 likewise are patentable over Freeman.

Claim 17 recites a computer for automated underwriting of segmentable, financial instrument assets, wherein the computer includes a database of asset portfolios, and the computer is programmed to "define clusters of assets by common attributes wherein each defined cluster includes assets having common attributes...select sample assets from each defined cluster for valuation purposes...receive a value assigned to each sample asset which is based on an expert opinion...perform an underwriting process on each sample asset using the expert opinion including determining whether each sample asset includes a combination of attributes and includes any additional attributes, analyzing each sample asset having a combination of attributes, and reconciling the value assigned to each sample asset having a combination of attributes."

Freeman does not describe or suggest a computer for automated underwriting of segmentable, financial instrument assets that is programmed to select sample assets from each defined cluster for valuation purposes, and receive a value assigned to each sample asset which is based on an expert opinion. Moreover, Freeman does not describe or suggest a computer

programmed to perform an underwriting process on each sample asset using the expert opinion including determining whether each sample asset includes a combination of attributes and includes any additional attributes, analyzing each sample asset having a combination of attributes, and reconciling the value assigned to each sample asset having a combination of attributes. Rather, Freeman describes a process for predicting the performance of a loan portfolio using a logistic regression formula that is applied to each loan unit. Specifically, Freeman determines a projected bad rate for each loan unit using the logistic regression formula. Although Freeman describes separating loan units into a plurality of loan groups based on a particular locality or a particular time frame, Freeman does not describe or suggest a computer as recited in Claim 17. Accordingly, Applicants respectfully submit that Claim 17 is patentable over Freeman.

Claims 18-24 depend from independent Claim 17. When the recitations of Claims 18-24 are considered in combination with the recitations of Claim 17, Applicants submit that dependent Claims 18-24 likewise are patentable over Freeman.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1-24 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

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